

AMENDMENT TO THE CLAIMS:

This listing of claims will replace all prior versions, and listings, of claims in the application:

LISTING OF CLAIMS:

1. (Previously Presented) A method of preparing a solid aggregate matrix material useful as a road construction material, the method comprising:
 - mixing a polar solvent, urea-formaldehyde precondensate, additional urea, fulvic acid and/or a salt thereof, to form a binder composition;
 - mixing the binder composition with soil; and
 - allowing the binder composition to set over a period of time of at least 30 minutes to form a solid aggregate matrix,
wherein the pH of the binder composition is adjusted to a value from 2.0 to 5.3.
2. (Original) A method according to claim 1 wherein the polar solvent is selected from the group consisting of water, alcohol, and mixtures thereof.
3. (Cancelled)
4. (Previously Presented) A method according to claim 64 wherein the sugar is selected from the group consisting of sucrose, glucose and fructose and mixtures thereof.
5. (Cancelled)
6. (Previously Presented) A method according to claim 1 further comprising mixing in, prior to the step of setting, a complex fatty acid derived from the complete oxidation of vegetable sugars.
7. (Cancelled)

8. (Previously Presented) A method according to claim 1 further comprising mixing in bitumen prior to the step of setting.
9. (Original) A method according to claim 8 wherein the bitumen is in the form of an anionic bitumen emulsion.
10. (Previously Presented) A method according to claim 1 further comprising mixing in a surfactant prior to the step of setting.
11. (Previously Presented) A method according to claim 10 wherein the surfactant comprises sodium dodecyl benzene.
12. (Previously Presented) A method according to claim 1 further comprising the step of adding any one or more agents selected from the group consisting of silicones, silanes, silanols, oils, anti-corrosion agents, ultraviolet light blocking agents, biocides, pH buffers, cement, ammonia, ammonium salts, plasticisers, ligna sulphinates and oxides thereof, phenols and mixtures thereof, prior to the step of setting.
13. (Original) A method according to claim 12 wherein the plasticisers are selected from the group consisting of phthalates, hydrocarbons, acetates, latex and glycols.
14. (Previously Presented) A method according to claim 12 wherein the ultraviolet light blocking agents are selected from the group consisting of organic phenols, phosphates and inorganic oxides.
15. (Cancelled)
16. (Previously Presented) A method according to claim 1 wherein the formaldehyde:urea molar ratio in the binder composition is between 1.5 and 2.5:1.

17. (Previously Presented) A method according to claim 16 wherein the formaldehyde:urea molar ratio in the binder composition is 1.83:1.

18. (Previously Presented) A method according to claim 1 further comprising the step of compacting the aggregate matrix material after the step of mixing and prior to the step of setting.

19. (Previously Presented) A method according to claim 1 wherein the acid is a weak organic acid.

20. (Original) A method according to claim 19 wherein the weak organic acid is selected from the group consisting of citric acid and acetic acid and mixtures thereof.

21.-39. (Cancelled)

40. (Previously Presented) A solid aggregate matrix material useful as a road construction material, the solid aggregate matrix material comprised of (i) a binder component comprising a mixture of a urea formaldehyde precondensate, a polar solvent, additional urea, fulvic acid and/or a salt thereof, and (ii) a soil component; wherein the pH of the binder composition has a value from 2.0 to 5.3 such that the binder composition sets into a solid over a period of time of at least 30 minutes from being mixed with the soil component.

41. (Previously Presented) The solid aggregate matrix material according to claim 40 wherein the polar solvent is selected from the group consisting of water, alcohol, and mixtures thereof.

42. (Cancelled)

43. (Previously Presented) The solid aggregate matrix material according to claim 65 wherein the sugar is selected from the group consisting of sucrose, glucose, and fructose, and mixtures thereof.

44. (Cancelled)

45. (Previously Presented) The solid aggregate matrix material according to claim 40 further comprising a complex fatty acid derived from the complete oxidation of vegetable sugars.

46. (Cancelled)

47. (Previously Presented) The solid aggregate matrix material according to claim 40 further comprising bitumen.

48. (Previously Presented) The solid aggregate matrix material according to claim 47 wherein the bitumen is in the form of an anionic bitumen emulsion.

49. (Previously Presented) The solid aggregate matrix material according to claim 40 further comprising a surfactant.

50. (Previously Presented) The solid aggregate matrix material according to claim 49 wherein the surfactant comprises sodium dodecyl benzene.

51. (Previously Presented) The solid aggregate matrix material according to claim 40 further comprising any one or more agents selected from the group consisting of silicones, silanes, silanoles, oils, anti-corrosion agents, ultraviolet light blocking agents, biocides, pH buffers, cement, ammonia, ammonium salts, plasticisers, ligna sulphinates and oxides thereof, and phenols.

52. (Previously Presented) The solid aggregate matrix material according to claim 51 wherein the plasticisers are selected from the group consisting of phthalates, hydrocarbons, acetates, latex and glycols.

53. (Previously Presented) The solid aggregate matrix material according to claim 51 wherein the ultraviolet light blocking agents are selected from the group consisting of organic phenols, phosphates and inorganic oxides.

54. (Previously Presented) The solid aggregate matrix material according to claim 40 wherein the formaldehyde:urea molar ratio is between 1.5 and 2.5:1.

55. (Previously Presented) The solid aggregate matrix material according to claim 54 wherein the formaldehyde:urea molar ratio is 1.83:1.

56. (Previously Presented) The solid aggregate matrix material according to claim 40 wherein the acid is a weak organic acid.

57. (Previously Presented) The solid aggregate matrix material according to claim 56 wherein the weak organic acid is selected from the group consisting of citric acid and acetic acid and mixtures thereof.

58.-63. (Cancelled)

64. (Previously Presented) A method according to claim 1 further comprising an additional step of adding a sugar prior to the step of setting.

65. (Previously Presented) The solid aggregate matrix material of claim 40 further comprising a sugar.

66. (Previously Presented) An article of construction comprising the aggregate matrix material prepared by the method of claim 1, wherein the article of construction is selected from a road, brick, paving stone, wall, flooring, foundation, slab, block, tile, pond lining, dam, tank, canal, embankment, railway line, tunnel, pylon, pole, pipe, surface coating, landing strip, grouting, sports field, artificial rock, statue, and decorative stone.

67. (Previously Presented) A method according to claim 1 further comprising mixing in humic acid prior to the step of setting.

68. (Previously Presented) A settable binder composition for mixing with a particulate material and setting to form a solid aggregate matrix, the binder composition comprising a mixture of a urea formaldehyde precondensate, a polar solvent, additional urea, and fulvic acid.

69. (Previously Presented) The settable binder composition of claim 68, further comprising a sugar.

70. (Cancelled)

71. (Previously Presented) The method according to claim 9 wherein said anionic bitumen emulsion is included in an amount greater than 0 and up to 5% by weight of said solid aggregate matrix.

72. (Previously Presented) The method according to claim 1 wherein said fulvic acid is a synthetic fulvic acid.

73. (Previously Presented) The method according to claim 72 further comprising mixing in an anionic bitumen emulsion prior to the step of setting.

74. (Cancelled)

75. (Previously Presented) The solid aggregate matrix material according to claim 48 wherein said anionic bitumen emulsion is included in an amount greater than 0 and up to 5% by weight of said solid aggregate matrix material.

76. (Previously Presented) The solid aggregate matrix material according to claim 40 wherein said fulvic acid is a synthetic fulvic acid.

77. (Previously Presented) The solid aggregate matrix material according to claim 76 further comprising an anionic bitumen emulsion.

78. (Previously Presented) The settable binder composition according to claim 68 further comprising an anionic bitumen emulsion.

79. (Cancelled)

80. (Previously Presented) The settable binder composition according to claim 68 wherein said fulvic acid is a synthetic fulvic acid.

81. (Previously Presented) The settable binder composition according to claim 80 further comprising an anionic bitumen emulsion.